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ABSTRACT

Using Jean Piaget's theory of thinking as a structuring mechanism, this paper presents a theoretical framework for the development of remedial, corrective, and developmental reading programs geared toward teaching reading comprehension. The four stages of intellectual development that Piaget has proposed (sensorimotor, preoperational, concrete operational, and formal operations) are discussed in terms of appropriate teaching and learning activities that reading teachers should use to promote reading development that is synchronized to the child's biological potential. Appended materials list skills, reading materials, instructional activities, and vocabulary concepts that can be coordinated with Piaget's four stages of development. (RL)

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Piaget's Genetic Approach to Reading and Language Development

Paper presented at the Southeastern Regional
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at Norfolk, Virginia
in November of 1980
by Louisa Kramer Vida

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INTRODUCTION

The purpose of this paper is to present a theoretical framework for the development of remedial, corrective, and developmental reading programs geared toward teaching reading comprehension. As a structuring mechanism, Piaget's theory of thinking, or comprehension of ideas, is excellent for in it skills develop in a particular sequence, and in stages.

Although Piaget never mentioned reading--and decoding has no part in this discussion--Piaget made a most important point, namely, that there is a biological basis for psychological development. Therefore, no matter how material is presented--or how well it is presented--a child will not learn anything until s/he is biologically ready to do so. Furthermore, once a child reaches his/her biological potential, s/he cannot learn any more at that time.

This occurs because the nervous system controls intelligence. As the anatomical and physiological aspects of the nervous system develop, somatic development also takes place. Therefore, the intellect, or thinking, develops.

When a person perceives, or matches an object with an idea, his/her nervous system has encoded and is pictorially representing the world. Therefore, thinking is really reliving what has or is happening--or imagining what will happen in the future. Language, and later reading comprehension, accompanies this thinking. It does not make a person think; nor does it help one think. Therefore, thinking precedes both language and reading comprehension.

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STAGE I

According to Piaget, stage one, the sensori-motor stage, extends from birth until approximately two years of age. At this time, although a child talks, there is no meaningful language--only oral motor activities--for intelligence is not yet truly operant.

At this point, to aid a child in his/her development of comprehension skills, one should present the child with active, concrete vocabulary concepts that s/he is biologically ready to comprehend. One should talk about these words to the child; read the words to her/him; and present the words in context by reading stories that contain them.

The attached categorized word list (see appendix 1), a practical application of Piaget's sensori-motor theory, deals with:

a) parts of the body and things the body can do;

b) the family, pets, and things around the house;

c) farm and zoo animals;

d) things on wheels; and

e) concepts, colors, and numbers.

As can be seen, these are extremely appropriate for language deprived and/or foreign speaking, as well as very young, children who are beginning to attempt to cope with the comprehension process.

STAGE II

Stage two, designated by Piaget as the era of preoperational thought, extends from approximately age two until approximately age seven. At this time the child is imitative and egocentric and is really only comprehending the main ideas in most stories.

As s/he does not possess the skill of reversibility, sequencing is not yet possible. Therefore, the child is usually concerned only with the beginning and the ending of a story.

In addition, as s/he has not yet developed classification skills, when a child comes into contact with a word that designates a class of objects, the child responds to that symbolic classification as if it were a particular item.

Furthermore, the child does not yet have the ability to cope with cause and effect type of statements. Therefore, when s/he asks "Why?," "What?" or "How?," the child is really merely asking for a repetition of already supplied information, for, until approximately the age of four, a child does not even possess "sentence sense."

At this stage, to aid a child in developing comprehension skills, capitalizing on his imitative inclinations by playing such games as "Simon Says" is quite useful.

Furthermore, the stories that are read to or by the child or told to him/her should contain the following characteristics:

They should be literal and should contain a repetitious plot that includes an easily stated main idea and few distracting details. An imitatively worded, short-phrased, first person narrative is excellent. Therefore, folk tales are especially good for this age group. If the reader and/or story teller substitutes the child's name for one of the names in the story, even a most reluctant listener can be cajoled into titling appropriate illustrations or answering questions in simple sentences. (See appendix 2 for a short bibliography of some titles that are particularly appropriate for this age group.)

STAGE III

Stage three, which extends from approximately age seven until approximately age eleven, is known as the concrete operations stage. During this time span a child develops his/her ability to think concretely and also begins to think somewhat abstractly. At this point, s/he can handle sequencing situations, tautologies, and can both construct and shatter classification systems. However, s/he still can neither destroy nor combine particular classes in the creation of new ones.

At this point, the reading comprehension skills that are most profitably emphasized are those dealing with sequencing, categorization, and cause/effect situations. Such vocabulary skills as synonym/antonym activities, and words as symbols should also be emphasized now.

Appendix 3 lists a few examples of ways to profitably present the above skills to this age group.

STAGE IV

Stage four is Piaget's stage of formal operations which extends from approximately age 11 to approximately age 14. At this point the most remedial students are probably reaching their pinnacle of conceptual ability, while average and gifted students are only beginning to conceptually soar. For this reason some students will only be able to handle inferential skills; while other students can easily profit at this time from both inferential and critical level tasks.

Via the use of content area and other non-text or "non-workbook-y" materials, all students should be introduced to the following inferential skills (see appendix 4). But, if a child has a decoding problem, these skills can probably only be profitably introduced on the child's listening comprehension

level. However, if, although the child is a remedial type of student, s/he does not have a decoding problem, then introducing these skills on the child's independent level is usually quite advantageous. Developmental and gifted students, though, usually cope well when these concepts are introduced on their instructional reading levels. (Some stage 4 inferential skills and instructional suggestions for their implementation are included in appendix 5.) Furthermore, all gifted, and, in addition, one's better developmental students, should also be exposed to the following critical reading skills (see appendix 6) at this time.

CONCLUSION

Thus, it can be seen that although Piaget never mentioned reading in his literature, structuring a reading comprehension program around his stages of intellectual development is a very logical thing to do!

Bibliography

Hilgard, R. (Ed.), Theories of learning and instruction. Chicago: The National Society for the Study of Education, 1964.

Klausmeier, H. I., & Goodwin, W. Learning and human abilities. New York: Harper & Row, 1966.

Munn, N. L. Psychology - the fundamentals of human adjustment. Boston: Houghton Mifflin Co., 1961.

Murphy, G. Personality - a biosocial approach to origins and structure. New York: Harper & Brothers Publishers, 1947.

Piaget, Jean. The child's conception of the world. New York: Harcourt, Brace & Co., Inc., 1929.

Piaget, Jean. The origins of intelligence in children. New York: W. W. Norton & Co., Inc., 1952.

Stone L. J., & Church, J. Childhood and adolescence - a psychology of the growing person. New York: Random House, 1968.

Appendix 1

SENSORI-MOTOR VOCABULARY CONCEPTS

(AGES 0 - 2)

I. A. Parts of the Body:

eyes	thumb	knee	hand	ear
nose	fingers	ankle	wrist	hair
mouth	leg	heel	arm	
chin	toe	calf	shoulder	
elbow	foot	thigh	neck	

B. Things the Body Can Do:

look	eat	tiptoe	tickle	wiggle
wink	smile	crawl	hug	comb
sneeze	whistle	kneel	pull	cut
blow	jump	hold	stretch	
smell	walk	paint	listen	

II. A. Family:

mommy	baby	brother	grandmother
daddy	sister	grandfather	

B. Pets:

bird	cat	dog

C. Things Around the House:

1. Objects:

house	flower	lamp
tree	table	TV
bed	chair	chest of drawers

2. Food:

bread	eggs	potatoes	apples
butter	peas	corn	oranges
milk	carrots	meat	bananas

3. Things associated with eating:

cup	spoon	knife	pan
dish	fork	pot	

4. Clothes:

hat	sweater	pants	shoes
coat	dress	jacket	skirt
boots	pajamas	tie	blouse

5. Toys:

drum	doll	sled	teddybear
car	ball	blocks	

III. A. Animals:

1. In the Zoo:

elephant	seal	bear	monkey
cage	snake	lion	giraffe

2. At the Farm:

horse	lamb	cow	barn
pig	rooster	duck	

IV. Things on Wheels:

bus	cab	tricycle
fire engine	car	bicycle

V. A. Concepts:

big - little

happy - sad

B. Colors:

red	yellow	purple
blue	orange	black
green	pink	white

C. Numbers:

one	three	five	seven	nine
two	four	six	eight	ten

Appendix 2

STAGE II

SOME APPROPRIATE TITLES

Happy Go-Lucky by William Wiesner

One Fine Day by Nonny Hogrogian

Grasshopper to the Rescue by Bonnie Carey

Punch and the Magic Fish by Emanuele Luzzati

How the Moon Began by James Reeves and Edward Ardizzone

Clever Kate by Elizabeth Shub

The Fisherman and His Wife by Margot Zemach

The Seven Ravens by Felix Hoffman

Jorinda and Joringel by Wanda Gags

The Elves and the Shoemaker by Freya Littledale

The Proud White Cat by Ruth Hurlimann

Well Done by Barbara Morrow

Hans in Luck by Felix Hoffman

The Table, the Donkey, and the Stick by Paul Galdone

Appendix 3

HOW TO PRESENT STAGE 3 SKILLS

A. Sequence

1. Put words in order.
   Ex. boy, man, baby

2. From a sentence list what happens first...and then what happens.
   Ex. I went to the ice cream store after the movie.

3. Rearrange sentences.
   Ex. house is the big.

4. Read sentences. Decide whether #1 or #2 comes first.
   Ex. I want to make a cake.
   a. Put the icing on. b. Bake it in the oven.

5. Put sentences in order.
   Ex. Mary lost three cents.
   Then she had only seven cents to spend.
   Mary had ten cents for candy.

B. Categorization

1. Find all the words that belong together.
   Ex.

2. Title each list (with term included).
   Ex. Pepsi
   soda
   Coke

3. Title each list (general term not included).
   Ex. Chevy Volkswagon
   Ford Pontiac

C. Cause/Effect

1. Match what happened and why.
   Ex. Helen is mad. It was hit with a ball.
   The glass broke. She lost her doll.

2. Answer the question.
   Ex. Bob can't find anything to wear. Last spring his weight was 62 pounds. He put on 12 pounds this summer.

   Bob doesn't have a pair of pants to wear because _____

3. From the information in the sentence, fill in the chart.
   Ex. We were late for the picnic because we had a flat.

	Cause	Effect
Sentence 1		
Sentence 2		

D. Words as Symbols

1. Multiple Meanings
   Ex. sound n. 1. noise; adj. 2. solid, secure, safe.

   a. From the sentence select the correct meaning.
      The building is sound.
      What is that sound?

   b. Use each meaning in a sentence.

2. Antonyms
   Find the antonyms in the sentence.
   Ex. John walked up and down the street.

3. Antonyms/Synonyms
   Write a synonym (or antonym) for the underlined word.
   Ex. David has a strange pet.

Appendix 4

STAGE IV

INFERENTIAL SKILLS

1. Implied Main Idea
2. Generalization
3. Compare/Contrast
4. Implied Cause/Effect
5. Reading Between the Lines
6. Drawing Conclusions
7. Predicting Outcomes
8. Perceiving Word Relationships
9. Identifying Character Traits
10. Identifying Character's Emotional Reactions
11. Identifying Character's Motives

Appendix 5

SOME STAGE 4 INFERENTIAL SKILLS

A. IMPLIED MAIN IDEA - in this order:

1. Select a sentence that expresses the main idea of the paragraph.
2. Write a sentence that expresses the main idea of a paragraph.
3. Select a question that the paragraph answers.
4. Write a question that the paragraph answers.
5. Select a title for the paragraph.
6. Write a title for the paragraph.
7. Select the topic sentence.

B. WORD RELATIONSHIPS

Use analogies.

Ex. Weight is to pound as temperature is to _____.

Ask for the relationship between the first two boxed words. Then use the relationship to fill in the blank.

C. DRAW CONCLUSIONS

1. Answer questions.
   Ex. "I am going to get out. I am cold and I do not like the fish going around my feet." Where is this person? _____
2. Select morals for Aesop's Fables, etc.
3. Write morals for short selections.
4. Solve riddles and word puzzles.
5. Solve detective stories.
6. Finish writing incomplete stories.

Appendix 6

STAGE 4 CRITICAL SKILLS AND
SOME IDEAS FOR PRESENTATION

1. Accuracy of Information - check one source against another.

2. Relevancy of Information - discuss timeliness, importance, and appropriateness for the reader.

3. Authenticity of Information - teach in conjunction with research skills, footnoting, etc.

4. Authoritativeness of Information - analyze author's qualifications.

5. Validity of Information - use ads and editorials to discuss whether the material is really presenting what it is supposed to be presenting.

6. Completeness of Information - use ads and politics. Discuss attempts to present partial pictures. Discuss good research techniques.

7. Ambiguity of Wording - discuss purpose of article. Analyze author's expertise.

8. Identify Audience - use ads.

9. Fact Versus Opinion - use newspapers - news stories vs. editorials, letters to the editor vs. original articles, etc.

10. Author's Bias - research and analyze author's qualifications, purpose, etc.

11. Point of View - use prose and poetry; fiction and non-fiction.

12. Language Techniques - for irony and sarcasm use literature like Gulliver's Travels. For emotionally charged words use political speeches. For half truths, appeals to needs, and exaggerated claims use ads.

13. Patterns and Organization of Writing - tie in with outlining, previewing of texts, and comparing types of literature.

14. Quality of Writing - in terms of mechanics, style, achievement of purpose, etc. Teach during editing and professional proofreading units.

15. Figurative Language - similes, metaphors, idioms, puns, etc. Make use of poetry as well as prose.

    Ex. 1. Fill in the blank. Create a vivid picture with a simile.
    The lady opened her pocketbook which looked like _____.

    2. Circle the metaphor. Explain the word's association.
    Summer ploughed into autumn.

    3. Find and explain the idiom.
    Will you dress up for the party?